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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,104	12/02/2003	Klaus Eschenroeder	13913-120001 / 2003P00250	4399
32864	7590	03/18/2009		
FISH & RICHARDSON, P.C.				
PO BOX 1022				
MINNEAPOLIS, MN 55440-1022				
EXAMINER				
CAO, DIEM K				
ART UNIT		PAPER NUMBER		
2194				
NOTIFICATION DATE		DELIVERY MODE		
03/18/2009		ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

Office Action Summary

Application No.

10/727,104

Applicant(s)

ESCHENROEDER ET AL.

Examiner

DIEM K. CAO

Art Unit

2194

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 10-20, 22 and 27-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 10-20, 22 and 27-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-3, 10-20, 22 and 27-33 are pending. Applicant has amended claims 1, 10, 14, 15, 18, 19, 22, canceled claims 4, 5, 21, 23-26 and added claims 27-33.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-3, 10-20, 22 and 27-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bendiksen et al (U.S. 2006/0085798 A1) in view of Alonso et al. (WISE: Business to Business E-Commerce).**

As to claim 1, Bendiksen teaches a computer program product, tangibly embodied in a machine-readable storage device, the computer program product comprising instructions operable to cause data processing apparatus to perform operations comprising (page 1, paragraph 2):

receiving a plurality of process data items associated with a plurality of process instances that are executed using a plurality of components operating in a distributed computer system (the analyzer 10 collects events originated from one or more particular sensors 14; page 5, paragraph 78 and page 3, paragraph 47, and page 9, paragraph 119), each process data item comprising application data and having been collected by agents (the sensor generates the event, function

call parameters to be sent; page 3, paragraphs 53-55 and page 5, paragraphs 82-85, and page 4, paragraph 62, and page 9, paragraph 119), wherein the plurality of components includes a first set of components that execute a first process instance (mortgage applications from online users, credit check application 1350, a tax assessment application 1360, a verify income application 1370, a title search application 1380 and an appraisal application 1390, evaluation application 1395, provides a response back to the client machine such as 'approved'; page 8, paragraphs [0114]-[0116]) and a second set of components that execute a second process instance (mortgage applications from online users, credit check application 1350, a tax assessment application 1360, a verify income application 1370, a title search application 1380 and an appraisal application 1390, evaluation application 1395, provides a response back to the client machine such as 'disapproved'; page 8, paragraphs [0114]-[0116]. Applicant is noted that even though the terms "first process" and "second process" are not used, the current system monitors multiple global transactions, wherein the above is just an example of a global transaction, therefore, the system teaches "a first process" and "a second process"), wherein the agents include at least a first agent associated with one of components of the first set of components and at least a second agent associated with one of the components of the second set of components (a plurality of sensors 14 are operated with the various applications to selectively capture event data based on the configuration data and commands sent from the analyzer 10; page 9, paragraph [0119], and the sensors 14 maybe considered as agents that reside in the space of a monitored process; page 3, paragraph[0047], since the global transaction involve multiple applications, there are agents associated with components of first and second processes);

comparing in accordance with a plurality of predefined rules each received process data item with one or more other received process data items to identify process data corresponding to process instances executed on the distributed computer system (at step 610, the analyzer 10 ... for a next potential matching event; page 6, paragraph 86-92 and page 5, paragraph 81);

grouping into a first group a plurality of process data items corresponding to a first process instance (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107), the first process instance being a single execution of a sequence of related steps carried out in the distributed computer system (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107);

grouping into a second group a plurality of process data times corresponding to a second process instance, the second process instance being a single execution of a second sequence of related steps carried out in the distributed computer system (Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107 and Assuming that the UserIdentifier ... the next potential matching event; page 6, paragraph 92 and the processes that he analyzer 10 users to group event ... and/or host; page 7, paragraph 107 and see Fig. 13. Applicant is noted that although the reference does not use “first group” or “second group” or “first process instance” or “second process instance”, the reference teaches multiple groups and multiple process instances, thus meet the claim limitation); and

reconstructing the first and second process instances based on the process data items in the first and second group, respectively (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and Another view is referred to as dynamic transaction visualization, where transactions are shown; page 9, paragraphs 122-123).

Bendiksen does not at least one of the plurality of components included in each of the first and second sets of components. However, Alonso teaches at least one of the plurality of components included in each of the first and second sets of components (Receive Claim, Check Customer, Cost Estimation, Payment; Fig. 1 and section 2.1 Virtual Enterprises).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Alonso to the system of Bendiksen because Alonso teaches a process monitoring that provides accurate measurements of all the characteristics affecting the execution of a process (page 6, section 5 Process Monitoring).

As to claim 2, Bendiksen teaches modeling a process based on the reconstruction of the first process instance (The graphical presentation ... of transaction problems; page 9, paragraphs 122-123).

As to claim 3, Bendiksen teaches monitoring the first process instance based on the process data items in the first group (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and In some cases the amount of

captured data may be make dynamic, e.g., as a function of the current environment or operating state of the system/processor being monitored; page 3, paragraph 56).

As to claim 10, Bendiksen teaches a computer product, tangibly embodied in a machine-readable storage device, the computer program product comprising instructions operable to cause data processing apparatus to perform operations comprising (page 1, paragraph 2):

receiving a specification of a predetermined condition (each configuration message ... rules ... event data package; page 3, paragraphs 53 and 55),

upon the occurrence of the predetermined condition (the sensor 14 determines ... if there is a matching event; page 3, paragraph 54), using agents to collect a plurality of process data items associated with a plurality of components operating in a distributed computer system (the sensor 14 generates the event, thereby capturing the state of the triggering function call; page 3, paragraphs 54 and 47), wherein the plurality of components includes a first set of components that execute a first process instance (mortgage applications from online users, credit check application 1350, a tax assessment application 1360, a verify income application 1370, a title search application 1380 and an appraisal application 1390, evaluation application 1395, provides a response back to the client machine such as 'approved'; page 8, paragraphs [0114]-[0116]) and a second set of components that execute a second process instance (mortgage applications from online users, credit check application 1350, a tax assessment application 1360, a verify income application 1370, a title search application 1380 and an appraisal application 1390, evaluation application 1395, provides a response back to the client machine such as 'disapproved'; page 8, paragraphs [0114]-[0116]. Applicant is noted that even though the terms "first process" and

"second process" are not used, the current system monitors multiple global transactions, wherein the above is just an example of a global transaction, therefore, the system teaches "a first process" and "a second process"), wherein the agents include at least a first agent associated with one of components of the first set of components and at least a second agent associated with one of the components of the second set of components (a plurality of sensors 14 are operated with the various applications to selectively capture event data based on the configuration data and commands sent from the analyzer 10; page 9, paragraph [0119], and the sensors 14 maybe considered as agents that reside in the space of a monitored process; page 3, paragraph[0047], since the global transaction involve multiple applications, there are agents associated with components of first and second processes); and

transferring the process data items to a central system (The sensor 14 ... with the analyzer 12; page 3, paragraph 51) operable to discover (at step 910, the user specifies an event(e) of interest ...for analysis; pages 7-8, paragraph 111) and reconstruct the first and second process instances based on common application data found in the process data items (At this time the list of events that make up the UOW can be displayed to the user for analysis; page 8, paragraph 111 and Another view is referred to as dynamic transaction visualization, where transactions are shown; page 9, paragraphs 122-123), the process instances each being a single execution of a sequence of related steps carried out in the distributed computer system (units of work, transaction; page 7, paragraphs 107-110 and process the mortgage requests, credit check application, tax assessment application, etc; page 8, paragraph 114). Applicant is noted that although the reference does not use "first group" or "second group" or "first process instance" or

“second process instance”, the reference teaches multiple groups and multiple process instances, thus meet the claim limitation.

Bendiksen does not at least one of the plurality of components included in each of the first and second sets of components. However, Alonso teaches at least one of the plurality of components included in each of the first and second sets of components (Receive Claim, Check Customer, Cost Estimation, Payment; Fig. 1 and section 2.1 Virtual Enterprises).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the teaching of Alonso to the system of Bendiksen because Alonso teaches a process monitoring that provides accurate measurements of all the characteristics affecting the execution of a process (page 6, section 5 Process Monitoring).

As to claim 11, Bendiksen teaches wherein the operating of collecting the process data items occurs without modifying the component (this process is conducted in a non-intrusive manner and does not require any additional recompilation or relinking of the user application; page 3, paragraph 48).

As to claim 12, Bendiksen teaches receiving a specification of a second predetermined condition (This management function ... messages, removing expired messages, and retrieving newly arrived messages, each configuration message contains a set of data collection filter rules; page 3, paragraph 53), and upon the occurrence of the second predetermined condition, collecting additional process data items associated with the component (the sensor 14 determines .. generates the event; page 3, paragraphs 54-55).

As to claim 13, Bendiksen teaches receiving a specification of a second component (inherent from multiple applications in a business process, each has its own local transaction/event collected by associated agent; page 8, paragraph 114 and page 9, paragraph 119 and This management function ... messages, removing expired messages, and retrieving newly arrived messages, each configuration message contains a set of data collection filter rules; page 3, paragraph 53), upon the occurrence of another predetermined condition, collecting other process data items associated with the second component, and transferring the other process data items to the central system (the sensor 14 determines .. generates the event; page 3, paragraphs 54-55).

As to claim 14, see rejection of claim 1 above. Bendiksen further teaches transferring the process data items from the agent to a central system (The sensor 14 ... with the analyzer 12; page 3, paragraph 51).

As to claim 15, it is the same as product claim of claim 1 except this is a method claim, and is rejected under the same ground of rejection.

As to claims 16-17, see rejections of claims 2-3 above.

As to claim 18, it is the same as product claim of claim 10 except this is a method claim, and is rejected under the same ground of rejection.

As to claim 19, it is the same as product claim of claim 1 except this is an apparatus claim, and is rejected under the same ground of rejection.

As to claim 20, see rejection of claim 2 above.

As to claim 22, it is the same as product claim of claim 10 except this is system claim, and is rejected under the same ground of rejection.

As to claims 27-33, Bendiksen teaches wherein the plurality of process data items includes a first type of process data item and a different, second type of process data item that are each collected by a common agent upon occurrence of a common predetermined condition (The rules determine the conditions which trigger event generation/reporting, as well as an amount of information to be collected from the event data packet, and "in some cases the amount of captured data may be made dynamic, e.g., as a function of the current environment or operating state of the system/processor being monitored; page 3, paragraphs [0053]-[0056]).

Response to Arguments

4. Applicant's arguments filed 12/9/2008 have been fully considered but they are not persuasive.

The previous 35 U.S.C. 112, second paragraph, rejection has been withdrawn in response to Applicant's amendment and arguments filed 12/9/2008.

In the remarks, Applicant argued in substance that (1) during the interview, discussed specific claim amendments that would put the claims in condition for allowance in view of the cited references, (2) Bendiksen and Kaler, taken either alone or in combination, fails to teaches "a plurality of components including a first set of components that execute a first process instance and a second set of components that execute a second process instance with at least one of the plurality of components included in each of the first and second sets of components, and the agents including at least a first agent associated with one of the components of the first set of components and at least a second agent associated with one of the components of the second set of components", because, Bendiksen teaches an agent associated with an entire user application,

the agent monitors execution of the entire user application, and not select components that execute the respective user application, therefore, Bendiksen fails to teach the first or second sets of components, and (3) during interview, examiner agreed that neither Bendiksen nor Kaler teaches limitations of the new claims, especially, "the plurality of process data item including a first type of process data item and a different, second type of process data item that are each collected by a common agent upon occurrence of a common predetermined condition.

Examiner respectfully disagrees with the arguments:

As to the point (1), during the interview, Applicant's representative and examiner discussed amendment to the claims with respect to references taught by Bendiksen and Kaler, and examiner did not agree that the amended claims would be allowable.

As to the point (2), the rejection of the claims has been modified to reject the new amended limitation. Especially, Bendiksen teaches the processes are global transaction which involve multiple applications, each application has its agent/sensor to collect data, and Alonso teaches at least one component is part of the first and second processes. Thus, the combination of Bendiksen and Alonso teaches the claimed limitations (see rejection of claim 1 above). Applicant is also directed to specification, on page 4, paragraph [0025], which defines the definition of "process" and "process instance".

As to the point (3), first, during the interview, examiner agreed that the prior art of record might not teach the limitations of claims 27-33. However, after consideration, examiner determines that Bendiksen teaches the limitation of new added claims (see rejection of claim 27-33 above). Therefore, the arguments are not persuasive.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Gao et al. (Monitoring Software Components and Component-Based Software) teaches providing a Java framework and a semantic approach to support tracking and monitoring software components in component-based program, including third-party components.
- Flasiński teaches Automata-Based Multi-agent Model as a Tool for Construction Real-Time Intelligent Control System.

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIEM K. CAO whose telephone number is (571)272-3760. The examiner can normally be reached on Monday - Friday, 7:30AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

DC
March 6, 2009